

A STUDY TO DETERMINE THE RELATIONSHIP
BETWEEN ABSENTEEISM AND TURNOVER
IN HOSPITAL STAFF NURSES

by

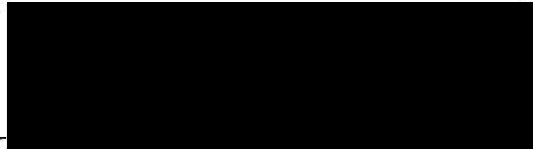
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A Thesis

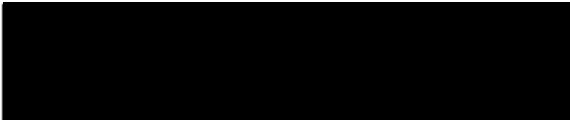
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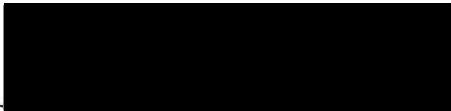
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TABLE OF CONTENTS

CHAPTER		PAGE
I	INTRODUCTION	1
	REVIEW OF THE LITERATURE	2
	The Concept of Job Satis- faction	3
	Overall Job Satisfaction and Turnover	4
	Job Satisfaction and Absenteeism	5
	Causes of Absenteeism and Turnover	6
	Absenteeism as a Predictor of Turnover	9
	The Behavioral Withdrawal Process	10
	Conceptual Model of the With- drawal Decision Process	13
	STATEMENT OF THE PURPOSE	15
	HYPOTHESES	15
II	METHODOLOGY	17
	DESIGN	17
	SETTING AND SUBJECTS	17
	DATA COLLECTION	18
	Measurement of the Independent Variable	18
	Measurement of the Dependent Variable	20

CHAPTER		PAGE
	ANALYSIS OF DATA	22
	ASSUMPTIONS AND LIMITATIONS	23
	Assumptions	23
	Limitations	23
III	RESULTS	25
	DESCRIPTION OF SUBJECTS	25
	DESCRIPTIVE FINDINGS OF MAJOR VARIABLES	27
	Absenteeism	27
	Turnover	27
	TEST OF HYPOTHESES	28
	Hypothesis 1	28
	Hypothesis 2	30
	Bi-Weekly Absentee Rates	31
IV	DISCUSSION	34
	ABSENTEEISM: THE INDEPENDENT VARIABLE	34
	TURNOVER: THE DEPENDENT VARIABLE	35
	THE RELATIONSHIP BETWEEN ABSEN- TEEISM AND TURNOVER	37
	BI-WEEKLY ABSENTEE RATES	39

CHAPTER		PAGE
V	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	42
	SUMMARY	42
	CONCLUSIONS	43
	IMPLICATIONS FOR NURSING	44
	LIMITATIONS OF THE STUDY	45
	RECOMMENDATIONS FOR FURTHER STUDY	45
REFERENCES	47
APPENDICES	
	A. Official Correspondence	55
ABSTRACT	56

LIST OF TABLES

TABLE		PAGE
1.	Biographic Characteristics of Staff Nurses in Relation to Terminating or Remaining	26
2.	t Values for Pay Periods in which Percent of Time Lost was Significantly Greater	33

LIST OF FIGURES

FIGURE		PAGE
1.	The Employee Turnover Decision Process	12
2.	Survival Curve for Separating Staff Nurses in the Hospital	29
3.	Bi-Weekly Time Lost Percentage for Nurses who Terminate and those who do not Terminate for Last 26 Pay Periods	32

CHAPTER I

Introduction

Society's focus on the quality, availability and cost of health care services today forces us to investigate and study the causes, the effects and the implications of behavioral phenomena, specifically employee absenteeism and its impact on termination. Two of the most serious problems facing hospital management today are absenteeism and high personnel turnover rates.

Absenteeism can be a crippling problem in a health care institution because it jeopardizes the quality of patient care. In addition, it is costly because it involves payment of overtime rates, decline in employee morale, and decreased productivity (Shuder, 1978).

Turnover is a special problem in nursing since nurses provide most of the direct professional health services to patients. Turnover in nurses creates a shortage and quality nursing care suffers (Tirney & Wright, 1973). Furthermore, the cost for replacing a registered nurse is very high, estimates range up to \$2,000 (Tuchi & Carr, 1971; Tirney & Wright, 1973; Lawler, 1973). Hospitals particularly experience an

unusually high turnover problem among professional nurses, averaging from 35 to 100 percent yearly. Some hospitals experience a complete turnover during a 12-month period (Seybolt, Pavett, & Walker, 1978).

In fact, absenteeism and turnover are assumed to be linked together, with frequent absenteeism leading to termination. Therefore, it was the purpose of this study to investigate the relationship between these two forms of withdrawal behaviors, absenteeism and turnover. The interrelationship between these variables represented the view that there is a continuum of withdrawal behavior, progressing from job dissatisfaction to a temporary withdrawal (absenteeism) and culminating in (turnover) a complete and final withdrawal.

Review of the Literature

In order to discuss the relationship between absenteeism and turnover, it is necessary to review the relevant literature, including a brief review of the concept of job satisfaction. The concept of job satisfaction is relevant since the study will investigate a continuum of withdrawal behavior, progressing from job dissatisfaction to a temporary withdrawal (absenteeism) and culmi-

nating in (turnover) a complete and final withdrawal. The relationship between job satisfaction and turnover will be examined as well as the relationship between job satisfaction and absenteeism. The discussion will then shift to the causes of absenteeism and turnover, focusing on absenteeism as a predictor of turnover and examining the behavioral withdrawal process. Finally, the discussion will conclude with the conceptual model of the withdrawal decision process.

The Concept of Job Satisfaction

A substantial amount of research has been conducted on the topic of job satisfaction. It has acquired an important place in the literature of industrial, vocational, and social psychology. Vroom (1965) stated that "Positive attitudes toward the job are equivalent to job satisfaction and negative attitudes toward the job are equivalent to job dissatisfaction." (p. 99). Job satisfaction is typically measured by questionnaires (e.g., Job Description Index) in which workers are asked to state the degree to which they like or dislike various aspects of their work. The degree to which a person is satisfied with the job is inferred from the verbal

responses to the questions.

Overall Job Satisfaction and Turnover

Vroom (1964) proposed that:

Workers who are highly attracted to their jobs should be subject to stronger forces to remain in them than those who are less attracted to their jobs. These stronger forces to remain should be reflected in a lower probability of behaviors which take the person out of his job, both permanently and temporarily. (p. 187).

Studies involving overall job satisfaction and employee withdrawal, in the form of turnover continues to sustain the interest of many disciplines (Mobley, Giffeth, Hand, & Meglino, 1979). Although there are extensive surveys of the literature that deal with job satisfaction and turnover, no attempt will be made to cite all of the articles that are relevant to a particular problem area. Instead, selected studies will be cited that are considered representative of the kinds of research being done in a particular area.

Studies by Brayfield and Crockett (1955), Herzberg, Mausner, Peterson, and Capwell (1957), and Vroom (1964) are now somewhat dated, but the findings generally indicated a strong relationship between employee job dissat-

isfaction and turnover. Porter and Steers (1973) later reviewed the preceding twelve years of research on job satisfaction as a predictor of turnover and found job satisfaction to be consistently and inversely related to turnover. They concluded that the evidence concerning the impact of job satisfaction on turnover was generally consistent with the findings as reviewed previously. A major asset of these findings was not simply their confirming nature but rather their increased methodological rigor. Mobley, et al. in 1979 updated the last major reviews and analyses of the turnover literature and once again found a negative relationship between overall job satisfaction and turnover.

Job Satisfaction and Absenteeism

Vroom (1964) has stated that, "In a sense, workers make daily decisions concerning whether or not they will appear for work." (p. 178). That is, the easy decision taken when an individual absents himself from his job is a "smaller" scale version of the important decision he makes when he quits his job.

It is common in review articles and basic texts on industrial psychology to find studies cited in support

of the contention that absence and job satisfaction are causally related (Argyle, 1972; Behrend, 1959; Maier, 1955; March & Simon, 1958; Patchen, 1960; Porter & Steers, 1973). Some writers who have reviewed a portion of the relevant literature do not share these views (Korman, 1971; Tiffin & McCormick, 1966; and Vroom, 1964). Furthermore, Nicholson, Brown, and Chadwick-Jones (1976), made a comprehensive review on individual correlational studies in the absence-satisfaction relationship and found that the research findings were mixed; significant, negative and nonsignificant correlations existed.

Causes of Absenteeism and Turnover

There are currently three points of view about the relationships between absenteeism and turnover and their causes (Lyons, 1972; Muchinsky, 1977). March and Simon (1958) represent the view that absenteeism and turnover, related or not, share common causes. Others view absenteeism as a form of withdrawal behavior that is an alternative to turnover (Hill & Trist, 1955; Rice & Trist, 1952). Still others view it as a continuum of withdrawal behavior, progressing from absenteeism to turnover (Herzberg et al., 1957; Melbin, 1961).

Previous research has placed little emphasis on the nature of the relationships that exist among these withdrawal forms. Two conflicting possibilities regarding such relationships can be delineated, depending upon the assumptions that have been made about the relationships of these two behaviors. The existence of a negative relationship between absenteeism and turnover has been advocated by the view that absenteeism is a form of withdrawal behavior that is an alternative to turnover (Hill & Trist, 1955). On the other hand, the existence of a positive relationship between absenteeism and turnover has been advocated by the view that there is a continuum of withdrawal behavior, progressing from absenteeism to turnover.

The present study investigates a continuum of withdrawal behavior. In the past, absenteeism has been considered an analogue of turnover, and it has been assumed that the two shared identical roots. Absenteeism as a form of withdrawal can be distinguished from turnover because: (a) the consequences associated with absenteeism are less than those associated with turnover; (b) absenteeism is a relatively easy decision, while termina-

tion is more carefully considered; and, (c) absenteeism may allow for temporary withdrawal; turnover, on the other hand, represents a complete and final withdrawal.

In view of some of these differences, it has been suggested that differences may exist between the causes of turnover and those of absenteeism (Porter & Steers, 1973). Lyons (1972) questioned whether these two forms of behavior were influenced by, determined by, or at least related to the same factors. Lyons' review of the relevant literature concluded that there is little empirical support for the notion of common correlates of both absenteeism and turnover but that absenteeism and turnover are phenomena of different levels of hierarchical structure. Porter and Steers (1973) speculated that different thresholds exist for the two forms of withdrawal. It is conceivable that the stimulus that produces the withdrawal behavior of absenteeism is of a low to moderate threshold and that the stimulus that produces the withdrawal behavior of turnover is of a higher threshold. This would further explain the strong relationship between job dissatisfaction and turnover and the weaker relationship between job dissatisfac-

tion and absenteeism.

Absenteeism as a Predictor of Turnover

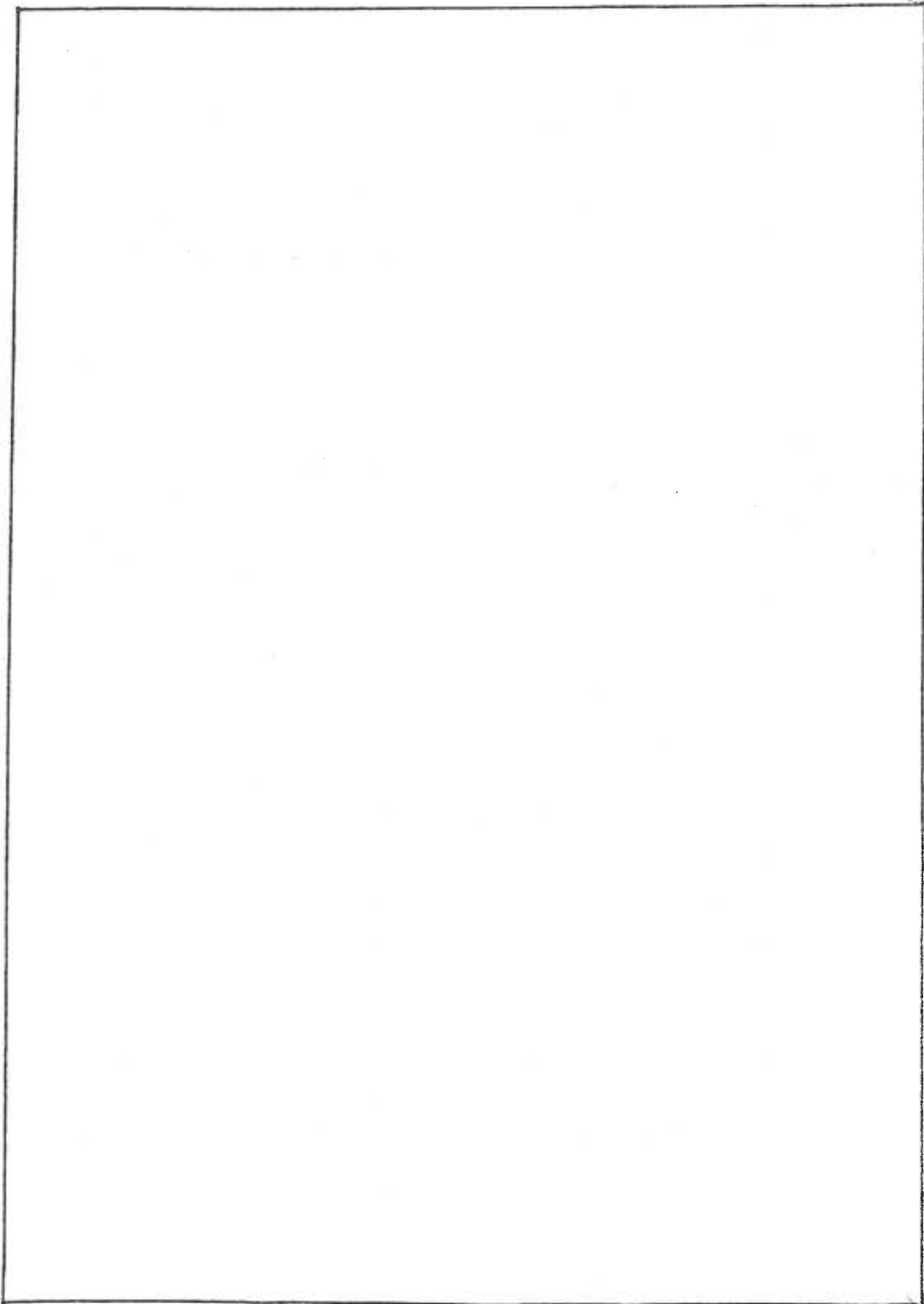
A number of studies at the individual level of analysis provide support for a positive relationship between absenteeism and turnover. A large number of these studies are now somewhat dated (e.g., van Zelst & Kerr, 1953; Hill & Trist, 1955; White, 1960; Melbin, 1961; Ronan, 1963; Revans, 1964). However, two recent studies have continued to provide support for a positive and significant relationship between absenteeism and turnover. Burke and Wilcox (1972) traced the absenteeism of telephone operators over several three-month periods. They found support for the progression of withdrawal hypothesis, that is, telephone operators who terminated had progressively worsening absenteeism. Similarly, Waters and Roach (1979) found that frequency of absences were corralated with termination over two one-year periods for a sample of female clerical employees.

Some cautions should be noted in summarizing the trends in these data. First, the studies mentioned here range from carefully executed and reported studies to

very poorly executed and reported ones. In addition, absenteeism and turnover were not the primary focus of most of the research, thus, data were omitted from the original reports that would have been valuable. Second, the reports cited in this review represent a hodgepodge of conceptually and operationally differing definitions of both absenteeism and turnover. Authors often did not report whether they were using days absent, or times absent. Finally, sex, age, skill level, and job factors had to be inferred from the majority of reports although each of these have been found to condition relationships with both absenteeism and turnover (Metzner & Mann, 1953). One of the purposes of this study was to increase the methodological rigor applied to studying the absenteeism turnover relationship.

The Behavioral Withdrawal Process

While the literature has indicated a consistent and negative relationship between job satisfaction and turnover, this has not been the case for the absence-satisfaction relationship. Here, the findings have been mixed since significant, negative, and nonsignificant correlations have been found (Nicholson, et al., 1976).

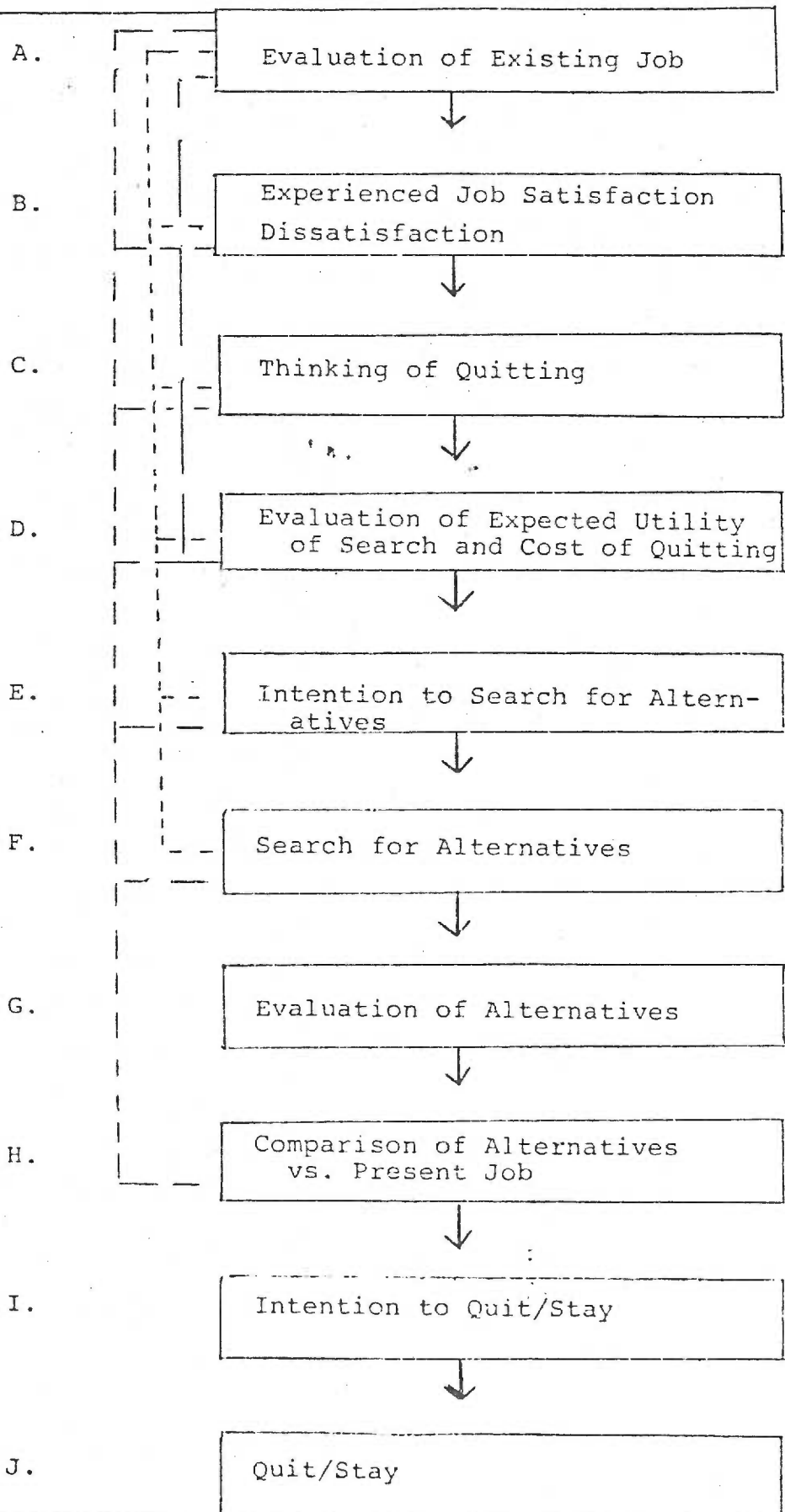


One explanation of these mixed findings may be that while all forms of withdrawal may manifest themselves together, their relative severity may be somewhat varied depending on their other correlates. Nevertheless, there is support for a positive and significant relationship between absenteeism and turnover; at the individual level of analysis. It is possible that absenteeism and turnover are phenomena of different levels of hierarchical structure and that different thresholds exist for the two forms of withdrawal. The consistencies and contradictions in these relationships could be explained in terms of a new and different conceptual model as suggested by Mobley (1977).

Mobley's model of the withdrawal decision process is a cognitive model that outlines the sequence of steps in the decision to terminate as shown in Figure 1. An interesting aspect of this cognitive model is that at every step in the sequence the individual can engage in other forms of behavioral withdrawal such as absenteeism, lateness, and passive job behavior. Therefore, it is probable that absenteeism mediates the relationship between job satisfaction and turnover, hence, it could be theo-

Figure 1. The employee turnover decision process.

(From Mobley, 1977).



(a) Alternative forms of withdrawal, e.g. absenteeism

rized that absenteeism is one measure that could serve as a sensitive indicator and predictor of termination.

Conceptual Model of the Withdrawal Decision Process

Based on an extensive review of the literature dealing with absenteeism and turnover, Porter and Steers (1973) concluded the following:

Much more emphasis should be placed in the future on the psychology of the withdrawal process ... our understanding of the manner in which the actual decision is made is far from complete (p. 173).

Toward this end Mobley (1977) developed a conceptual model, of the employee withdrawal decision process, which identifies several of the possible intermediate linkages in the satisfaction-turnover relationship. The model suggests the possible mediating steps between dissatisfaction and actual quitting as follows. In Figure 1, Step A represents the process of evaluating one's existing job and Step B represents the resultant emotional state of satisfaction or dissatisfaction. One of the consequences of dissatisfaction is to stimulate thoughts of quitting (Step C), however, other forms of withdrawal such as absenteeism or passive job behavior may occur. The next step (Step D) in the withdrawal decision pro-

cess is an evaluation of the expected utility of search and of the cost of quitting. If the costs of quitting are high and the expected utility of search is low, the individual may reevaluate the existing job, reduce thinking of quitting, and/or engage in other forms of withdrawal behavior (absenteeism). Step E, a behavioral intention to search for alternatives, is followed by an actual search, Step F. Then Step G, an evaluation of alternatives, is initiated. This is followed by a comparison of the present job to alternatives, Step H. A behavioral intention to quit, Step I, will occur if the comparison favors the alternative, followed by the actual withdrawal, Step J (Mobley, 1977). At each step in this model, it is possible to engage in alternative forms of withdrawal such as absenteeism.

It is conceivable that parallel to the cognitive model of termination decisions a behavioral model of termination behaviors could exist. Schematic representation of these conceptual relationships would be:

JOB DISSATISFACTION → ABSENTEEISM → TURNOVER

Therefore, absenteeism is a probable intermediate linkage

in the relationship between job satisfaction and employee termination. Since job satisfaction is thought to be a predictor of turnover, it could be theorized that in addition absenteeism could also be a predictor of termination.

Mobley (1977) states:

Research is still needed on the determinants of alternative forms of withdrawal behavior and on how the expression of withdrawal behavior changes as a function of time and of changes in or reevaluation of the environment. (p. 238).

Statement of the Purpose

The purpose of this research was to investigate the relationship between absenteeism and turnover in hospital staff nurses. Specifically, the study focused on the nature of these relationships over time and explored whether the two forms of withdrawal followed a sequential pattern with increased absenteeism preceding termination.

Hypotheses

The following hypotheses were tested:

Hypothesis 1: There will be a positive relationship between absenteeism (within a pre-termination per-

iod of 12 to 23 months) and termination in hospital staff nurses.

Hypothesis 2: Absenteeism will be significantly greater (within a pre-termination period of 12 to 23 months) for hospital staff nurses who terminate than in hospital staff nurses who do not terminate.

CHAPTER II

Methodology

Design

The research design was non-experimental, retrospective, and correlational. Payroll records over a maximum of a two-year period were reviewed for staff nurses who terminated within a certain time period and a comparison group of staff nurses who did not terminate.

In the following sections, the setting and subjects are described; the data collection procedure and the data analysis discussed. Assumptions and limitations of the study are also included.

Setting and Subjects

The study was conducted in a large metropolitan hospital in the Portland area. The subjects of the study were 51 female staff nurses hired as regular full time staff nurses on selected nursing units during the 12 months of 1978. The staff nurses were divided into two groups based on the length of time they stayed with the hospital. The first group of 21 nurses included all staff nurses hired during the 12 months of 1978 and terminating 12 to 23 months later. The second group of 30

nurses included staff nurses hired during the 12 months of 1978 and remaining with the hospital through a 24-month period.

Data Collection

For the purpose of this study, data was collected from existing hospital payroll records. Data that was collected for each employee was hire date, work hours, absence hours, and termination date. The information was then placed on large tally sheets for data analysis via a computer program. To insure confidentiality of individual subjects, a code number was assigned to each employee's data.

Measurement of the Independent Variable

Absenteeism was the independent variable. Absence was any time away from scheduled work time, but did not include scheduled absences such as vacation time, holidays, and so forth. The recorded absenteeism measures did include unscheduled absences for which employees were given sick leave, or unpaid absences. The following two separate measures were used to calculate bi-weekly rates:

Absenteeism and
Turnover

19

$$\begin{array}{l} \text{Time Lost Percentage} \\ \text{(Absenteeism Rate)} \end{array} = \frac{\begin{array}{l} \text{Total Individual} \\ \text{Sick Hours} \\ + \text{Unpaid Absences} \end{array}}{\begin{array}{l} \text{Total Individual} \\ \text{Scheduled} \\ \text{Work Hours} \end{array}} \times 100$$

$$\begin{array}{l} \text{Frequency Rate} \end{array} = \frac{\begin{array}{l} \text{Number of Absence} \\ \text{Spells Started} \\ \text{In Period} \end{array}}{\begin{array}{l} \text{Total Number of} \\ \text{Pay Periods} \end{array}}$$

Because there appears to be differential findings for different measures of absenteeism, in the present study, two measures of absenteeism were used. Other research has revealed that there is extreme variability in the reliability of various absence measures; some indices are fairly reliable while others are not. The reliability of the frequency index appears to be the highest and the most consistent across studies (e.g., .74 and .60, Turner, 1960; .61, Huse & Taylor, 1962; .43, Chadwick-Jones et al., 1971; Latham & Pursell, 1975). Inconsistency is evidenced in the reliability of the time lost index (.70, Ronan, 1963; .19, Chadwick-Jones et al., 1971).

Only one study, Chadwick-Jones et al. (1971), has considered (indirectly) the validity problem (an index which measures what it purports to measure). They examined the interrelationships of seven absence measures and found that most measures were incorporated (in part) in the time lost index. Chadwick-Jones et al. (1971) concluded that "as a general indicator of voluntary absence levels, the frequency index has the most to recommend it." (p. 470). Intuition and reliability evidence suggest that the frequency index is a superior measure of psychological withdrawal, in part due to the potential bias of long term sickness on the time lost index (Chadwick-Jones et al., 1971).

Measurement of the Dependent Variable

Turnover was the dependent variable. Turnover and termination were used synonymously. The measure of turnover that was used was voluntary resignation, it did not include turnover due to retirement, permanent layoffs, and death. Turnover was treated as a nominal variable. The following two separate measures were used to calculate turnover:

Absenteeism and
Turnover

21

$$\text{Crude Labor Turnover Index} = \frac{\text{Number of Leavers in Period}}{\text{Average Number of Employees During Period}} \times 100$$

$$\text{Stability Index} = \frac{\text{Number of Employees with 12 Months or More Service Now}}{\text{Total Employed One Year Ago}} \times 100$$

These two sets of analyses were carried out in order to clarify the nature and extent of turnover. The crude labor turnover is the most conventional measure of turnover, it expresses the number of leavers in a period as a percentage of the average numbers employed (during the same period). Next, the stability index was calculated according to conventional methodology, expressing the number of employees with one year's service as a percentage of the numbers employed at the beginning of the year. The stability index is necessary since the crude labor turnover rate provides no information about length of service (Williams, Livy, Silverstone & Adams, 1979).

Absences need to be studied as a function of the person-work relationship. An important aspect of this

is length of service. The difficulties of adjustment are not felt only by those who leave. They are felt also to some degree by those who stay. It is in relation to staying on that absences, as a distinct from leavings, may be seen to have special importance. On this assumption, one might expect certain changes in the preferred modes of withdrawal at different stages of service. Consequently, length of service is an important factor in the absenteeism-turnover relationship. Length of service was a consideration in the present study.

Analysis of Data

The first hypothesis was tested utilizing two separate point biserial correlations. One correlation was between the variables absenteeism rate and turnover. The other correlation was between the variables frequency rate and turnover. The second hypothesis was tested utilizing two separate one-tailed t tests computed with the level of significance set at ($p = .05$). This test was deemed appropriate to determine if there was a significant difference in absenteeism for hospital staff nurses who terminated than in hospital staff nurses who did not terminate. In addition, in order to explore

whether the two forms of withdrawal followed a sequential pattern with increased absenteeism preceding termination, a graph was plotted using bi-weekly absentee rates and comparing absentee patterns of those nurses who terminated and those who did not terminate.

Assumptions and Limitations

Assumptions

In this research investigation, the following three assumptions were made:

- 1) Hospital payroll records from which the data collection would be extracted would be accurate;
- 2) there was a continuum of withdrawal behavior, progressing from absenteeism to turnover;
- 3) absenteeism was a measure of satisfaction.

Limitations

The two limitations of the study were:

- 1) The sample was drawn from acute-care units within one hospital;
- 2) only full time staff nurses were

Absenteeism and
Turnover

24

included.

Because of these limitations, generalizations to other unit types, other nursing personnel or non-acute hospitals cannot be made.

CHAPTER III

Results

Description of Subjects

The subjects of the study were 51 staff nurses hired in a large metropolitan hospital during the 12 months of 1978. Of these 51, 21 terminated employment during the second year of employment and 30 remained with the hospital for at least two years. An additional 29 nurses who left during the first year were not included in this study. The large majority of the staff nurses were white (86.0 percent). Blacks represented 6.0 percent, and Hispanics and Asians represented 4.0 percent each. Single nurses comprised 71.0 percent of the sample, while married nurses comprised 29.0 percent. Most of the staff nurses were in their twenties (64.0 percent). Nurses in their thirties represented 18.0 percent; in their forties 8.0 percent; in their fifties 6.0 percent; and unknown 4.0 percent. Registered Nurses represented 71.0 percent of the sample and Licensed Practical Nurses 29.0 percent. The group that terminated was very similar in demographic characteristics to the group that did not terminate (See Table 1).

Table 1.
Biographic Characteristics of Staff Nurses
in Relation to Terminating or Remaining

Biographic Variables	Total (n = 51) %	Terminating (n = 21) %	Remaining (n = 30) %
<u>Ethnic Group</u>			
White	86	95	80
Black	6	0	10
Hispanics	4	5	3
Asians	4	0	7
<u>Marital Status</u>			
Single	71	76	67
Married	29	24	33
<u>Age Group</u>			
Twenties	64	66	63
Thirties	18	19	17
Forties	8	5	10
Fifties	6	10	3
Unknown	4	0	7
<u>Skill Level</u>			
Registered Nurse	71	71	70
Licensed Practical Nurse	29	29	30

It was important that the demographic characteristics be similar, since various characteristics have been found to condition relationships with both absenteeism and turnover (e.g., Metzner & Mann, 1953).

Descriptive Findings of Major Variables

Absenteeism

Time lost for staff nurses who terminated ranged from 1.76 percent to 13.44 percent of scheduled hours with a mean of 7.56 percent and a standard deviation of 3.41. For staff nurses who remained, the range was 0.96 percent to 15.13, and the mean was 5.29 percent with a standard deviation of 3.49.

The annual number of absences for staff nurses who terminated ranged from 3.38 to 27.04 with a mean of 14.51, and a standard deviation of 6.09. For staff nurses who remained, the range was 1.05 to 23.5 with a mean of 9.9 and a standard deviation of 5.13.

Turnover

In 1978, 22.5 percent of the staff nurses left before completing the first half year and another 13.75 percent left during the last six months of the first year. The total turnover rate was 36.25 percent of the

total entrants within the first year of employment and 26.25 percent of the total entrants within the second year, leaving 37.5 percent still employed after two years. The survival curve for the separating staff nurses of all 1978 entrants ($n = 80$) is shown in Figure 2. by every two pay periods, twenty-six pay periods is equivalent to one year. In this study, the initial crude labor turnover rate was 36.25 percent ($n = 29$) for staff nurses terminating employment, this group was excluded from further analysis. This study focused on those who terminated employment during the second year of employment ($n = 21$) and those who remained with the hospital through a two-year period of employment ($n = 30$), these two groups constituted the stability index of 63.75 percent.

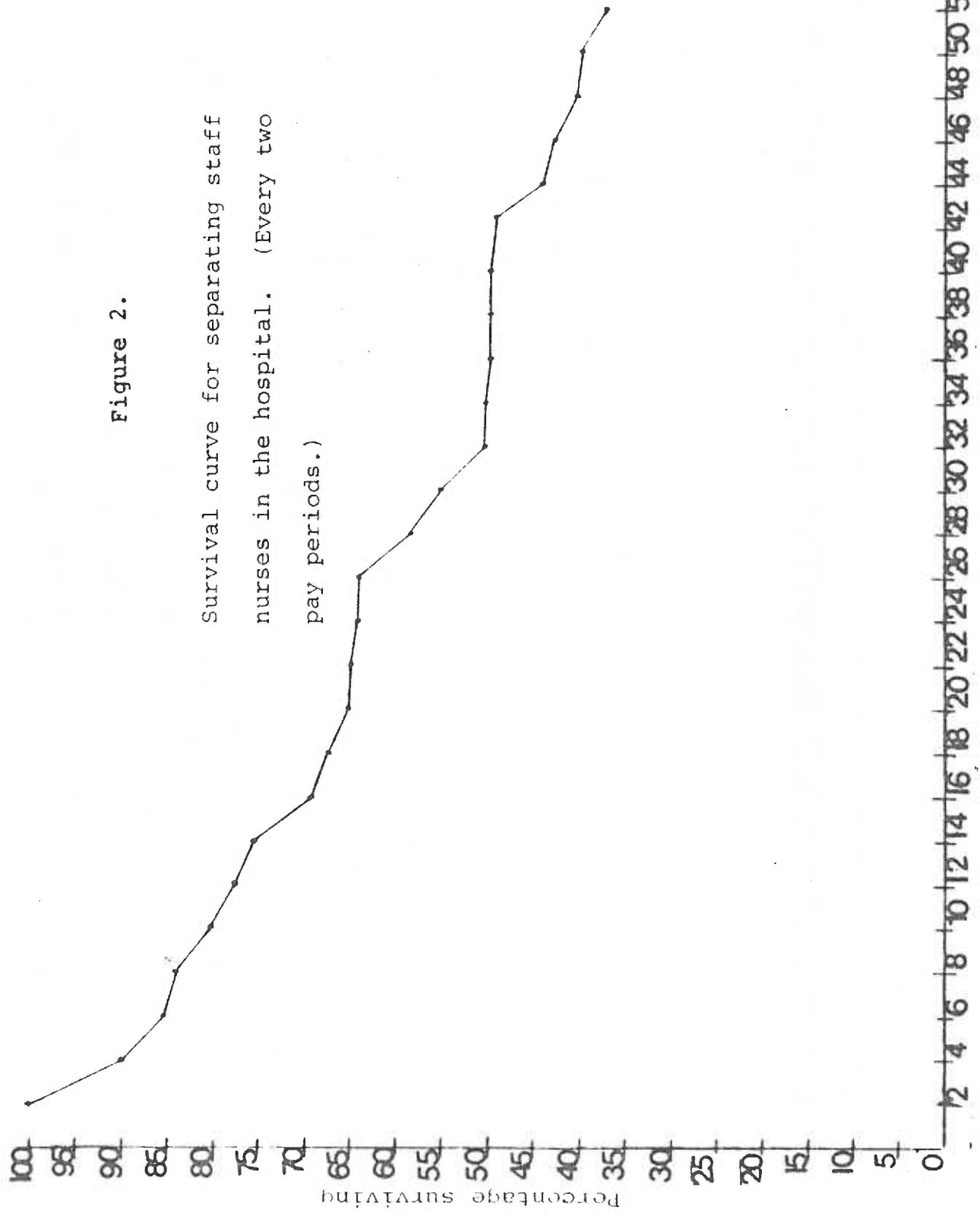
Test of Hypotheses

Hypothesis 1

The first hypothesis stated that there would be a positive relationship between absenteeism (within a pre-termination period of 12 to 23 months) and voluntary termination of hospital staff nurses. Absenteeism was measured by percent of total hours absent (time lost

Figure 2.

Survival curve for separating staff
nurses in the hospital. (Every two
pay periods.)



1978

Survival periods by every two pay periods
(n = 80)

1980

percentage) and number of times absent (frequency rate). The hypothesis was tested utilizing two separate point biserial correlations, with significance at $p = 0.05$. The tests found a positive relationship between percent of total hours absent and turnover (.31) and a positive relationship between frequency of absences and turnover (.39). The hypothesis was accepted.

Hypothesis 2

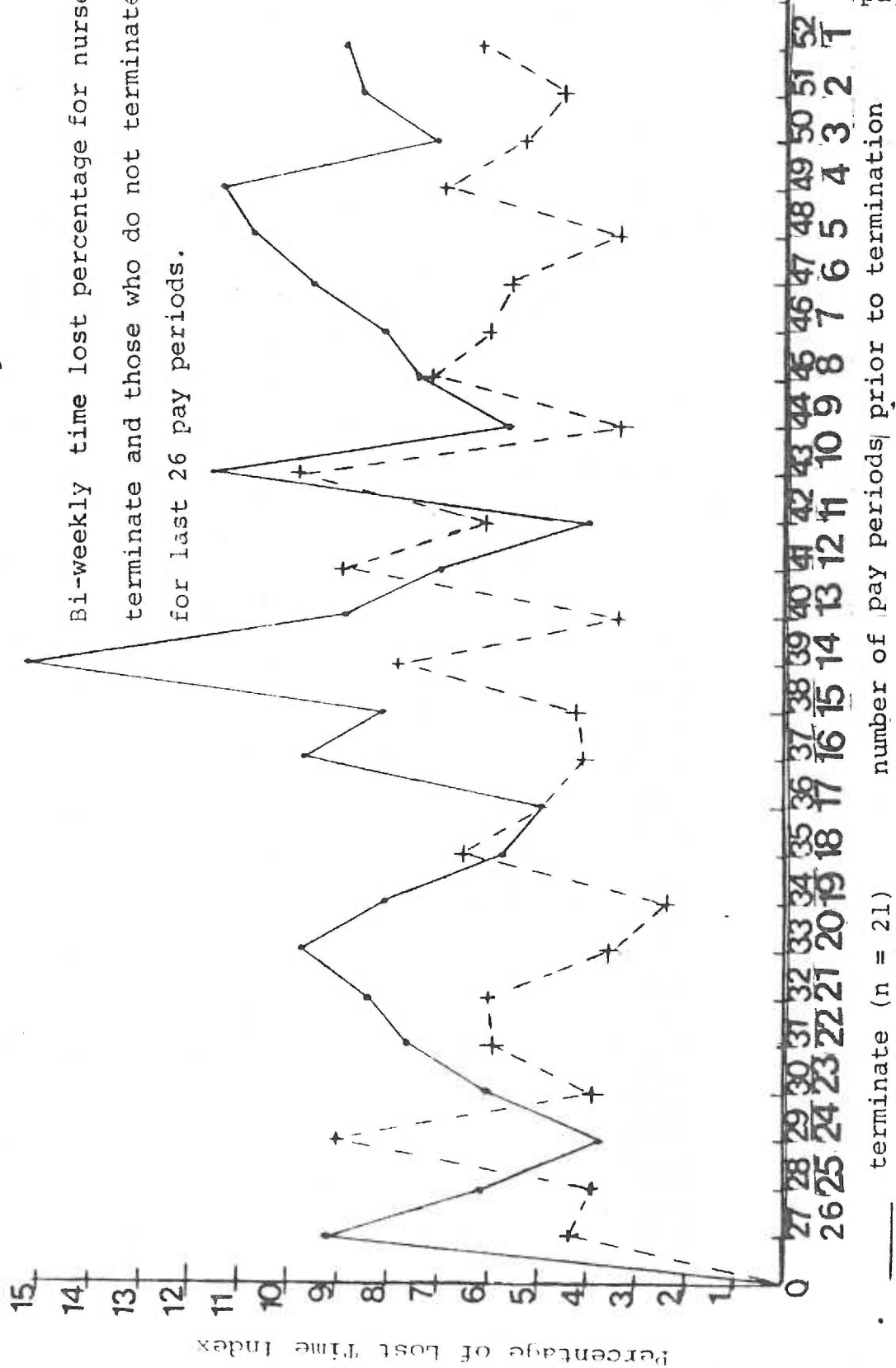
The second hypothesis stated that absenteeism would be significantly greater (within a pre-termination period of 12 to 23 months) for hospital staff nurses who voluntarily terminated than for hospital staff nurses who did not. Again, two measures of absenteeism were used, percent of total hours absent and number of times absent. This hypothesis was tested utilizing two separate one-tailed t tests of significance with an alpha level of .05. Results of this test indicated a t value of 2.32 for percent of total hours absent and a t value of 2.92 for number of times absent. It was concluded that absenteeism was significantly greater for hospital staff nurses who terminated, using both measures. The hypothesis was accepted.

Bi-Weekly Absentee Rates

In the present study, a comparison was made of absentee patterns of those nurses who terminated and those who did not terminate. It was found that on the average, the mean percent of time lost of those nurses who terminated was greater than the mean percent of time lost of those nurses who did not terminate; the nature of this relationship was maintained throughout a period of 26 bi-weekly pay periods prior to termination (pay periods 27-52). The results are graphed in Figure 3. In addition, a one-tailed t test was computed to determine if there was a significant difference in absenteeism for hospital staff who terminated than in hospital staff nurses who did not terminate at every pay period. It was concluded that percent of time lost was significantly greater at pay periods 33, 34, 37, 38, 39, 40, 48, and 51. The results are recorded in Table 2. Furthermore, it was concluded that percent of time lost was significantly greater for hospital staff nurses who terminated prior to termination in two of the last five pay periods (pay periods 48 and 51).

Figure 3.

Bi-weekly time lost percentage for nurses who terminate and those who do not terminate for last 26 pay periods.



• — terminate (n = 21) number of pay periods prior to termination

+ - - - Do not terminate (n = 30)

Table 2.

t values for pay periods in which percent
of time lost was significantly greater.

Pay Period No.	t value	df	Prob.
<u>33</u>	2.45	49.0	.00
<u>34</u>	2.32	49.0	.02
<u>37</u>	1.79	49.0	.04
<u>38</u>	1.98	49.0	.03
<u>39</u>	2.06	49.0	.02
<u>40</u>	2.41	49.0	.01
<u>48</u>	1.99	49.0	.03
<u>51</u>	1.78	49.0	.04

CHAPTER IV

Discussion

Absenteeism: The Independent Variable

In a report from the Bureau of Labor Statistics by Hedges (1977), the total time lost represented about 3.5 percent of the scheduled hours of employees who usually work full time. In a further breakdown of total time lost by occupation, the total time lost was 3.9 percent for medical occupation workers in the United States. Synder (1978) in a study of the hospital's records found that for all employees in 1975 and 1976, the hospital had an absenteeism rate of 3.9 percent. Kirtane (1975), employing similar methods for studying the percent of total time lost among nursing personnel as those in the present study, found the overall mean was 3.7 percent for nursing personnel on 11 acute-care units in a 300 bed hospital, during a period of 12 months.

The results of the percent of total time lost were very similar in the studies by Hedges, Snyder, and Kirtane (3.9, 3.9, and 3.7, respectively). In comparison, the mean total time lost in this study was 5.29 percent

for staff nurses who remained with the hospital and the mean total time lost was 7.56 percent for staff nurses who terminated. Both of these values, 5.29 percent and 7.56 percent, were greater than those found by Hedges, Snyder, and Kirtane.

Turnover: The Dependent Variable

A record was made of the individual lengths of survival of all entrants in 1978 and a measure of the change in the composition of the entrant group was obtained. The initial rate of leaving is high, 22.5 percent of staff nurses leaving before completing a first half-year. About 13.75 percent leave in the last six months of the first year. Thereafter, the proportion leaving stabilized. The total turnover rate was 36.25 percent of the total entrants within the first year of employment and 26.25 percent of the total entrants within the second year of employment, leaving 37.5 percent still employed after two years. The survival curve for the separating staff nurses of all 1978 entrants is shown in Figure 2.

The results of this study were compared with labor turnover among ancillary staff in two London hospitals reported by Williams, Livy, Silverstone & Adams (1979).

In their study, they found that the basic shape of the survival curves was similar to those found in other studies, an initial period of steep decline, then one of gradual descent and finally a levelling off. (Rice et al., 1950; Knowles, 1976). In the present study, these same results are confirmed.

Williams (1979) found a 70.0 percent turnover rate of new employees during the first 12 months of employment. In comparison, in the present study there is a 36.25 percent turnover rate of new staff nurses during the first 12 months of employment. The reason for this wide difference in turnover may be attributable to the skill level and/or various other reasons.

In a conceptually similar study by Hollerfreund et al. (1981), new graduates (registered nurses) hired in 1975 and 1976 had a turnover rate of 36 percent and 35 percent, respectively, within the first year of employment, peaking at six to nine months of employment. In the present study, there is a 36.25 percent turnover rate of new staff nurses during the first twelve months of employment. There is no difference in turnover rates between these two studies.

The Relationship Between Absenteeism and Turnover

Every study has reported a positive degree of relationship between absenteeism and turnover, with the exception of the study by White (1960) who found differential findings for different measures of absenteeism. White determined that frequency of absences was significantly higher for a sample of employees who left the company than in a sample of employees who remained with the company. However, when the index of absenteeism was percent of time lost, no significant difference between the two groups was found. In comparison in the present study, the research results showed that there is a positive relationship between percent of total hours absent and turnover (.31) and a positive and significant relationship between frequency of absences and turnover (.39). The relationship between frequency of absences and turnover was stronger (.39) than the relationship between percent of total hours absent and turnover (.31). This is congruent with the findings of Chadwick-Jones et al. (1971) who found the frequency index a better predictor of turnover than percent of time lost.

Furthermore, the finding of (.39) in the present

study concurs with that of Waters and Roach (1979) who found that frequency of absences during the year in which employment was terminated was significantly related to turnover (.38).

One explanation for the positive relationship between absenteeism and termination is that in the present study the unit of analysis was the individual. A major factor in the literature relating absenteeism and turnover is the unit of analysis. The positive relationship found between absenteeism and turnover was consistent with several studies using the individual as the unit of analysis (see reviews by Lyons, 1972, and Muchinsky, 1977; also recent studies by Beehr and Gupta, 1978, and Waters & Roach, 1979).

Several studies have examined the relationship between the two variables on an individual basis, while other studies have used intact groups. The findings from the two types of studies are different. The results from the group level studies offer conflicting findings. Studies have reported positive relationships, negative relationships and no relationship between absenteeism and turnover. In the present study, the

positive relationship found between absenteeism and turnover was consistent with previous studies using the individual as the unit of analysis (see reviews by Lyons, 1972 and Muchinsky, 1977).

Another possibility may be that at the individual level of analysis the withdrawal forms are not alternatives to each other or possibly only temporary alternatives. It may be that alternative forms of withdrawal do not succeed in coping with the discomfort associated with the work environment or if they do succeed, they succeed temporarily and continue to proceed to a final and complete withdrawal (termination).

In conclusion, two hypotheses were tested using two different tests; but since they both showed conceptually similar results, only the results of the first hypothesis were discussed here.

Bi-Weekly Absentee Rates

In order to explore whether the two forms of withdrawal followed a sequential pattern with increased absenteeism preceding termination, a graph was plotted using bi-weekly absentee rates. In the present study, a comparison was made of absentee patterns of those nur-

ses who terminated and those who did not. The percent of time lost was significantly greater for hospital staff nurses who terminated than for those who did not for eight out of the last twenty-six pay periods (pay periods 27-52). One occurs the pay period prior to the period in which the termination takes place (2-4 weeks); a second occurs four pay periods prior to termination (8-10 weeks); and the remaining six occur almost in sequence from the thirteenth to the twentieth pay period prior to termination (26-40 weeks).

Burke and Wilcox (1972) in their study found an increase in the percent of time lost in the three-month period prior to the one in which the group terminated, and was highest in that period. The results of Burke and Wilcox are questionable, however, since percent of time lost was prorated for a full year for those nurses who terminated during a three month tenure period. Waters and Roach (1979) also found that frequency of absences increase prior to termination. Frequency of absences in the year of termination correlated at .38, while during the previous year frequency of absences correlated with turnover at .28. In both of these studies,

Absenteeism and
Turnover

41

those who terminated showed an increase in absenteeism prior to actual termination. Results from this study also indicated an increase in absenteeism prior to termination, however, this increase was most consistent and highest at 26-40 weeks prior to termination. Perhaps, the Burke and Wilcox study would have had the same results if they had not prorated absenteeism for a full year.

CHAPTER V

Summary, Conclusions and Recommendations

Summary

This study investigated the relationship between two forms of withdrawal behavior, absenteeism and turnover. Specifically, the study focused on the nature of these relationships over time and explored whether the two forms of withdrawal followed a sequential pattern with increased absenteeism preceding termination. The interrelationship between these variables represented the view that there is a continuum of withdrawal behavior, progressing from job dissatisfaction to a temporary withdrawal (absenteeism) and culminating in (turnover) a complete and final withdrawal.

The subjects of the study were 51 staff nurses hired in a large metropolitan hospital during the twelve months of 1978. Payroll records over a maximum of a two-year period were reviewed for staff nurses who voluntarily terminated and a comparison group of staff nurses who did not terminate. Two measures of absenteeism were used. One of these measures percent of total hours absent (time lost percentage) and the other measures

number of times absent (frequency rate). The measure of termination used was voluntary resignation.

Conclusions

A summary of the findings revealed the following:

First, the results clearly establish a positive relationship between absenteeism and turnover at the individual level of analysis. Both time lost percentage and frequency of absences were correlated with termination. The data were analyzed using point biserial correlations and one-tailed t tests of significance.

Second, it was found in the present study that those who terminated showed an increase in absenteeism prior to actual termination. These results are consistent with the progression hypothesis; that of progressively worsening absenteeism culminating in turnover.

A third and related result is that, on the average, the mean percent total time lost of those nurses who terminated was greater than the mean percent total time lost of those nurses who did not terminate; percent of time lost was significantly greater at 8-10 and 26-40 weeks prior to termination. There is support for a tentative conclusion that the absenteeism level is main-

tained at a greater level over time for staff nurses who do terminate.

Implications for Nursing

What can be done about both the absenteeism and the eventual turnover? The results of this research indicate that a continuous effort must be made by the organization while the employee is still a member; efforts to control turnover might be aided by controlling absenteeism. Absenteeism could be perceived to be an early leading indicator of turnover. If employee absenteeism could be identified and controlled as it occurs, the withdrawal behavior may not progress to turnover. Management's job would be one of identifying and dealing with the factors that underly the increasing absenteeism. Many factors such as dissatisfaction with the job or with supervision or dissatisfaction due to lack of promotion opportunities can be directly affected by managerial action.

In addition, the manager could plan ahead to some extent to reduce the negative effects of anticipated withdrawal. Various tactics may be employed such as increasing overtime, hiring temporary nurses, reorganiz-

ing work schedules, reducing patient admission, moving patients, or closing wards. The nurse manager will be in a position to do all that is possible to prevent the quality of patient care from falling.

Limitations of the Study

Several weaknesses are inherent in this study due to the non-experimental design. First, in this study it was not feasible to manipulate the independent variable. The data represented material that could not be manipulated because the variable had already occurred. The lack of manipulative control of the independent variable in this study prevents one from drawing strong causal conclusions. Second, subjects were not randomly assigned, instead, the groups were formed by a self-selecting process; such lack of randomization also interferes with conclusions regarding cause and effect relationships.

Recommendations for further Study

The following recommendations for further research are suggested as a result of this study. A fruitful line of future research on this topic would continue to focus on the nature of the absenteeism-turnover relation-

ship over time. Integration of this research could provide indications of the dimensionality of withdrawal behavior. Time-series data are needed so that idiosyncratic temporal influences would not go undetected. Previous research has placed little emphasis on the nature of the relationships that exist among these withdrawal forms over time.

Other areas of needed research that have implications for the absenteeism-turnover relationship are addressed. On a theoretical level, more research is needed in developing theories that weave absenteeism into the fabric of employee behavior. Next, various studies exploring the relationship between absenteeism and personal, attitudinal, and organizational variables have been conducted but few have treated absenteeism as a discrete phenomenon. Finally, while there is considerable nursing literature on labor turnover, there is little to be found on the shape of their survival curves. This lack of information needs to be remedied.

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APPENDICES

APPENDIX A
Official Correspondence

1620 N.E. 156th Avenue
Portland, Oregon

May 17, 1981

Ms. Arlene Austinson
Director of Nursing
Providence Medical Center
700 N.E. 47th Avenue
Portland, Oregon 97214

Dear Ms. Autinson:

I am presently a graduate student enrolled in the Nursing Administration and Management program at the University of Oregon Health Sciences Center in Portland. This program requires a Master's thesis which will be titled "A Study to Determine the Relationship Between Absenteeism and Turnover in Hospital Staff Nurses."

For the purposes of this study, it will be necessary to collect data from existing hospital payroll records that reflect total scheduled work hours and absence hours. Confidentiality and anonymity of the subjects will be assured.

Since I wish to cause the least amount of disruption as possible, I am willing to personally collect the data required and will be most happy to share with you the findings of this study. I very respectfully request your permission to conduct this research project at Providence Medical Center.

Sincerely,

Florentina G. Angeles
R.N., B.S.N.

AN ABSTRACT OF THE THESIS OF
Florentina G. Angeles

For the MASTER OF NURSING

Title: A STUDY TO DETERMINE THE RELATIONSHIP BETWEEN
ABSENTEEISM AND TURNOVER IN HOSPITAL STAFF
NURSES: A RETROSPECTIVE STUDY

Approved: _____

Linda Kaeser, Ph.D., Thesis Advisor

The subjects of the study were 51 staff nurses hired in a large metropolitan hospital during the 12 months of 1978. Of these 51, 21 terminated employment during the second year of employment and 30 remained with the hospital through a two-year period of employment. The purpose of this study was to investigate the relationship between absenteeism and turnover in hospital staff nurses. Specifically, the study focused on the nature of these relationships over time and explored whether the two forms of withdrawal followed a

sequential pattern with increased absenteeism preceding termination.

Absenteeism was measured by percent of time lost and frequency of absences. The crude labor turnover index and the stability index were utilized to calculate turnover. The relationship between absenteeism and turnover was tested with point biserial correlations. One-tailed t tests were computed to determine if absenteeism was significantly greater for hospital staff nurses who terminated than for those who did not ($p = .05$). Additional one-tailed t tests were calculated for each pay period to compare the last 26 pay periods of employment for those nurses who terminated and those who did not.

In this study, it was concluded that there was a positive relationship between absenteeism and turnover for hospital staff nurses and absenteeism was significantly greater for hospital staff nurses who terminated. Absenteeism was found to be significantly greater for hospital staff nurses who terminated than for those who did not for eight out of the last twenty-six pay periods, one occurs the pay period prior to the period in which the termination takes place.